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Hwei-Fe'n Cheah

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BEADS IN THE STRAITS SETTLEMENTS: TRADE AND DOMESTIC DEMAND, 1827-1937

Hwei-Fe'n Cheah

Beads have long been a part of the exchange of goods in Southeast Asia. Indo-Pacific beads were traded in Southeast Asia and colored beads from China were exchanged for spices and forest products from the Indonesian archipelago. The Straits Settlements, comprising the ports of Singapore, Malacca, and Penang, was formed in 1826, to consolidate the trading position of the British in Southeast Asia. Singapore, in particular, developed into a major entrepot of the 19th and early 20th centuries. Research by the late Peter Francis, Jr., drew attention to its role as a channel for a part of the Southeast Asian bead trade. This article extends his research by plumbing the rich statistical records of the Straits Settlements to examine the changing role of the Straits Settlements from a bead emporium to a consumer of beads, with Singapore acting as a distribution center for a growing domestic demand for beads.

INTRODUCTION

Beaded objects and ornaments have played a historically important part in rituals and ceremonies in Southeast Asia. Beads were strung into necklaces, crafted into items such as dance aprons and baby carriers, woven into fabrics, and embroidered onto textiles as decorative ornamentation (Maxwell 2002:58-66; Hector 1995). In parts of Southeast Asia, beads were passed through generations of a family as heirlooms and valued for their supposed magical properties (Sarawak Museum 1984:1).

Even though glass beads were made locally, the Southeast Asian region was also a consumer of imported beads (Adhyatman and Arifin 1996:27, 74-76; Francis 1989a:6-7, 29, 2002:169-172). Francis examined the bead trade in Southeast Asia and found that Singapore in the early 20th century was a major mart for imported beads destined ultimately for Sarawak and the Netherlands Indies as the main markets, with Brunei, Sabah, Indo-China, China, and Thailand as minor customers (Francis 1989b:21-24, 2002:172).

Francis' investigation covered selected years between 1909 and 1934, during which time the percentage of European beads imported to Singapore increased, as did the volume of European beads traded with Indonesia (Francis

2002:172). The pattern of bead trade was obviously not static and hints at the possibility of dynamic developments in bead trade throughout the 19th and 20th centuries. This article draws on various statistical sources on bead trade to examine the role of Singapore and the other Straits Settlements ports in regional bead trade from 1827 to 1937, and how it changed. It considers the factors that may have contributed to the continuation of the bead trade through the Straits even while developments in regional trade and shipping eroded the position of Singapore as an emporium. At the same time, domestic demand for beads within the Straits Settlements itself formed an increasingly important element in the bead trade through Singapore.

The establishment of the Straits Settlements as a bead trading post from 1827 to 1839 continues through the 1840s to 1860s with at least some of the bead trade taking place via India. Detailed statistics available from 1870 to 1937 provide a clear picture of the expansion and decline of regional bead trade in the Straits Settlements. The rise in domestic demand from the end of World War I supplanted regional demand, changing the nature of the Straits Settlements bead trade. Beginning with what Francis (2002:167-180) argued was the end of the Asian maritime bead trade as Europeans began to dominate it, European supremacy in the 19th-century bead trade augured a phase of development in *local* beadwork in the Straits Settlements.

THE STRAITS SETTLEMENTS BEAD TRADE

Located at the crossroads of a burgeoning east-west trade, the Straits Settlements developed into an important entrepot in the 19th century, servicing the rich hinterland of the Malay Peninsula, Thailand, and the Netherlands Indies (see Huff 1994:1-68).¹ Singapore, founded in 1819 as the lynchpin of a strategy for British trade in the region, seems a logical mart for beads, building on its geographical location and its trading activities (Fig. 1). Penang, taken under British control in 1786, and Malacca, ceded by the Dutch to the British in 1824, acted as secondary players in the bead trade.

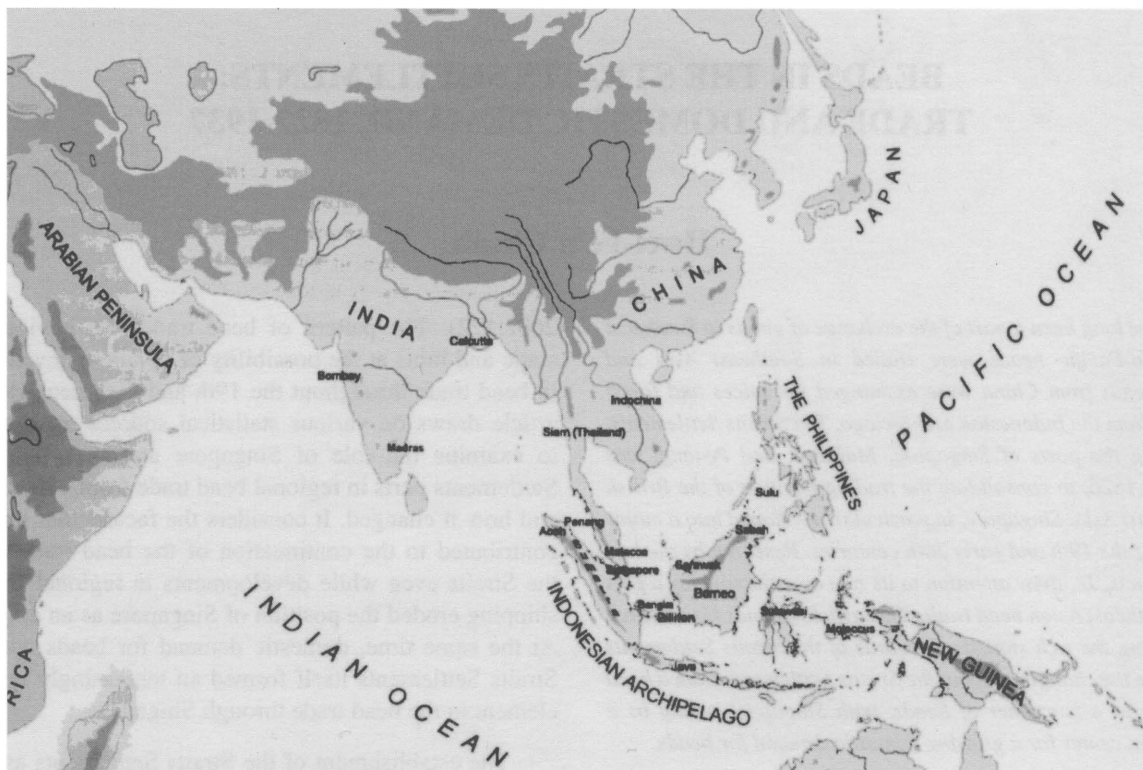


Figure 1. Map of Asia showing key places mentioned in the text (after Cribb 2000:map 0.3).

Singapore, Malacca, and Penang were consolidated into a single administrative unit known as the Straits Settlements in 1826, but the bead trade predates its formation as an administrative entity. Beads were imported to Southeast Asia from India and the Muslim West until the 12th century but appear to have been replaced thereafter by Chinese beads, particularly of the coiled variety (Francis 1989a). Islands such as Sulu, Billiton, Sumatra, Java, and the Moluccas bought colored beads from China (Adhyatman and Arifin 1996:76). Imported beads were used as currency in barter in the Indonesian archipelago and in Indo-China. Chinese beads were exchanged for birds' nests, turtle eggs, cane, rhinoceros horn, and hornbills in Sarawak (Sarawak Museum 1984:5). Bead trade also passed through Malacca, a major Southeast Asian trading post of the 15th century where traders bought colored-glass and carnelian beads from India to exchange for gold dust in Borneo (Meilink-Roelofs 1962:85, 100). Intriguingly, a 15th-century Chinese traveler's account lists *melted* beads amongst the items traded in Malacca by the Chinese (Fei 1436:55).

Venetian-made beads, destined ultimately for the Indonesian archipelago, were introduced to the Malacca trade by the 16th century indirectly via the east-west trade route through Egypt and India and by European penetration into Southeast Asia as direct trade was developed (Adhyatman and Arifin 1996:88; Francis 1989b:21, 2002:171). Finds of

17th- and 18th-century Venetian and Bohemian glass beads in Java and Borneo tend to support this, even though Francis has argued that the penetration of European beads into parts of the archipelago was slow (Adhyatman and Arifin 1996:93-98; Francis 2002:171).

The Dutch also exported beads, including Dutch and German ones, to their colonies (Kidd 1979:34). The import of Dutch glass beads to the Netherlands Indies would make particular sense since the owner of one of the Amsterdam glassworks was among the founders of the Dutch East India Company (Adhyatman and Arifin 1996:89; Dubin 1987:112). Brass beads, as well as globular and faceted wound glass beads which were probably made in Europe, were found on the wreck of *De Liefde*, a Dutch ship that sank on its way from Amsterdam to Java in 1711 (Karklins 1988; Karklins and Schrire 1991:64).

Other Europeans, notably the English, were active in Southeast Asian trade as well. John Scattergood, an English private trader operating between 1697 and 1723, traded between India, Persia, China, Java, and Sumatra. His items may have included beads as his correspondence shows that he sent to Aceh in northern Sumatra some "gold thread of China, the beads being wrapped in paper, called *chioquinsinsoan*...."; it is, however, unclear if the term "beads" refers to a means of wrapping the thread (Temple et

al. 1935:82, 109). By the mid-19th century, European beads were exported to the English and Dutch colonies through London, Liverpool, Hamburg, and Amsterdam (Karklins and Adams 1990:75).

Evidence from cargo lists published in the *Singapore Chronicle and Commercial Register* (1827-1835) suggests that Singapore is likely to have started trading beads at a fairly early stage in its development, continuing in the role previously played by Malacca as a regional distribution center for beads.

DOCUMENTATION ON THE BEAD TRADE

Detailed historical information on the bead trade in Southeast Asia is limited, perhaps because the value of the bead trade was, in itself, relatively small. In absolute terms, the value of bead trade was insignificant relative to that of other imports of intermediate goods such as cotton thread. For instance, the value of beads imported to the Straits Settlements was \$25,186 compared to \$1,151,411 for cotton twist in 1870 (Straits Settlements 1870:227, 235).² Compared to the bead trade in other parts of the world, the value of the beads imported to the Straits Settlements was also small. In 1896, German East Africa imported 264,815 pounds in weight of beads from Germany, Bohemia, Venice, India, China, and Japan (Jargstorf 1995:110). Between 1924 and 1937, when volume data are available, the average annual bead imports to British Malaya came to only 43,850 pounds (Malaya 1924-1937).³

A number of sources do exist, however, which can illuminate our understanding of the Straits Settlements bead trade from 1827. The *Singapore Chronicle and Commercial Register*, published weekly between 1827 and 1835, for an expatriate mercantile population, carried detailed shipping lists which included bead imports and exports. The *Pinang Gazette and Straits Chronicle* (1838-1839) was a similar paper published in the early 19th century and contained shipping lists for Penang. Some statistical information on beads is also available from the *Statistical Tables Relating to British Self-Governing Dominions, Crown Colonies, Possessions, and Protectorates* for 1853 to 1866 (Great Britain 1855-1866), and the *Statistical Abstract Relating to British India 1840-1865* (Great Britain 1867).

Authority over the Straits Settlements was transferred from the India Office to the Colonial Office in 1867. Subsequently, detailed data on bead trade are available from the *Blue Books*, the official government publication of statistics for the region (Straits Settlements 1870-1937). Additional data are given in the *Return of Foreign Imports*

and *Exports* for British Malaya (Malaya 1924-1937) and provide a useful comparison.

Major department stores in the Straits Settlements (e.g., John Little's and Robinsons) which may have retailed beads in their haberdashery departments in the 19th century were contacted but were unable to provide any information on bead sales. Held in the School of Oriental and African Studies at the University of London, the records of the English trading company Guthrie Corporation, which was established in the Straits Settlements in 1824 as Messrs. Guthrie & Clark, did not yield any information on beads. Other potential sources of information that could not be investigated because of time and resource constraints are company records of bead manufacturers such as the Società Veneziana Conterie and the Bohemian-based bead merchant Albert Sachse & Company which may contain specific information on prices and the types of beads involved.

Data Variance and Interpretation

The Straits Settlements *Blue Books* for 1870-1937 and the *Return of Foreign Imports and Exports* for British Malaya 1924-1937 provide a detailed breakdown by country of the value of bead imports and exports for all years from 1870 to 1937, except 1884, 1886, and 1887. Changes in political boundaries during this period are reflected in the changes of the definitions of a region. For comparability across time, the statistics have therefore been restated to follow either geographical or political boundaries. For instance, because there is no breakdown in the data for Bombay, Calcutta, and Madras between 1872 and 1890, the figures have been aggregated for British India for the entire period 1870 to 1937. Where political boundaries cut across a geographical or ethnographic region, data have been aggregated on the basis of geography, for example, in the case of Dutch and British Borneo.

The country of origin listed for merchandise does not necessarily indicate it was made there. For instance, Swiss-made goods would not have been listed under Switzerland which has no port, but under the port from which the goods were exported, e.g., the Netherlands. Based on trade routes, it is reasonable to assume that the beads exported from Europe would have been produced either in France, Germany, Bohemia (part of Austria until 1918), or Italy, the major bead-producing countries in Europe. Beads imported from Hong Kong and China would most likely have been produced in China. Beads imported from India and the Middle East may have been manufactured elsewhere, however. The Società Anonima Fabbriche Unite di Canna, Vetri e Smalti per Conterie apparently had trading posts in Bombay, Calcutta, Alexandria, and Cairo in the mid-

19th century, and it is possible that the Società Veneziana Conterie e Cristallerie, formed in 1898, had sales agents in similar places (Jargstorf 1995:60-61). Albert Sachse, the bead trader and a co-founder of the Società, had representatives in Africa, and possibly India, who bartered their products for items such as animal skins, ivory, and local art while they assessed local demand for beads (Nový 2002:214). Transshipment trade where goods were imported into Straits Settlements ports and remained in the custody of shipping agents while awaiting export were not included in the returns. This means that the beads that were re-exported resulted from transactions undertaken after they reached the Straits Settlements.

Although some countries both imported beads from and exported beads to the Straits Settlements, most were either net importers or exporters of beads. For instance, in 1890, Italy exported \$8,780-worth of beads to Singapore but imported only \$880-worth of beads from there (Straits Settlements 1890). It is possible that the latter beads represent unsold consignments rather than beads produced in other countries and exported to Italy via Singapore. The case is less clear for China which produced glass beads south of Beijing but also imported beads from Singapore (*see* Francis 1986:17, 2002:59-60). Interestingly, no imports of European glass beads to China (through Canton) were recorded as of the first half of 1863 (Francis 2002:173).

There is some discrepancy between the figures for bead exports from Singapore to Penang under the entry for Singapore and those for imports to Penang from Singapore under the entry for Penang. For example, in 1890, the statistics for Singapore reveal that \$270-worth of beads were exported to Penang, but those for Penang indicate only \$120-worth of bead imports (Straits Settlements 1890). One reason for the discrepancy may be that some exports from Singapore to Penang were not recorded while they were in transit. The cumulative totals of imports and exports, however, show a higher value of beads imported to Penang than exported from Singapore between 1881 and 1920 (Straits Settlements 1881-1920) suggesting that some caution needs to be taken when interpreting these figures.

Starting in 1930, the designation for beads changed to "beads and bead trimmings." This does not appear to have affected the pattern of the bead trade. In the analysis, the aggregate figures for bead imports and exports are, therefore, taken to represent the trade in beads only.

Dollar Values, Weights, and Quantities of Trade

It is necessary to understand if the change in the value of the bead trade also indicates a change in the volume (i.e.,

quantity) of beads traded. Currency fluctuations could affect the aggregate value of beads traded without affecting the quantity of trade. Import and export values have, therefore, been restated in terms of sterling values in the tables to eliminate one element of currency fluctuation. Sterling was selected as the base currency because of the availability of annual exchange rates, its relative stability against other European currencies in the late 19th and early 20th centuries and because of the dominance of bead imports from Europe (Schneider et al. 1992).

In addition, a rise in aggregate bead values could be due to an increase in price rather than quantity. It is difficult to ascertain the actual *quantities* of beads traded since historical data on the prices of different types of beads are not easily obtainable. Furthermore, the data do not provide a breakdown of the types of beads traded. Nevertheless, we can obtain an indication of general bead price movements from prices prevailing in other parts of the world. For instance, the price of glass seed beads in Bohemia declined throughout the late 19th century due to technological improvements and fell tenfold between 1892 and 1900 (Neuwirth 1994:108). Such extreme price declines may be expected to have affected export prices due to competition between manufacturers and distributors. Technological improvements in the production of other types of glass beads may have maintained or even reduced bead prices in general. Since 78% of the beads imported to the Straits Settlements between 1870 and 1902 were imported from Europe, the percentage increase in the bead trade based on monetary values is likely to understate the percentage increase in the quantity of beads traded.

From 1924 onwards, the Straits Settlements *Blue Books and Return of Foreign Imports and Exports* for British Malaya provide the weight (in pounds) of the beads traded. Figure 2 shows that, apart from 1925-1926, the changes in traded values correspond closely to changes in traded volumes (by weight). Bead imports in 1925-1926 were characterized by an increase in European (mainly German) products which was accompanied by a higher average value per pound of beads.⁴

Prior to 1886, merchandise values were supplied by ship captains rather than shippers and may not have been complete (Chiang 1978:214-217). Official values of trade for the period after 1886 are thought to be fairly accurate, however, because Singapore was a free port so there was little incentive to misstate values in an attempt to avoid duties (Huff 1994:xv). In general, the values for imports represent the cost, insurance, and freight or the latest sale values of the goods. The values for exports represent the cost and charges for delivering goods on board ship. Regarding re-exports, there is generally some difference between import and export values for the same goods,

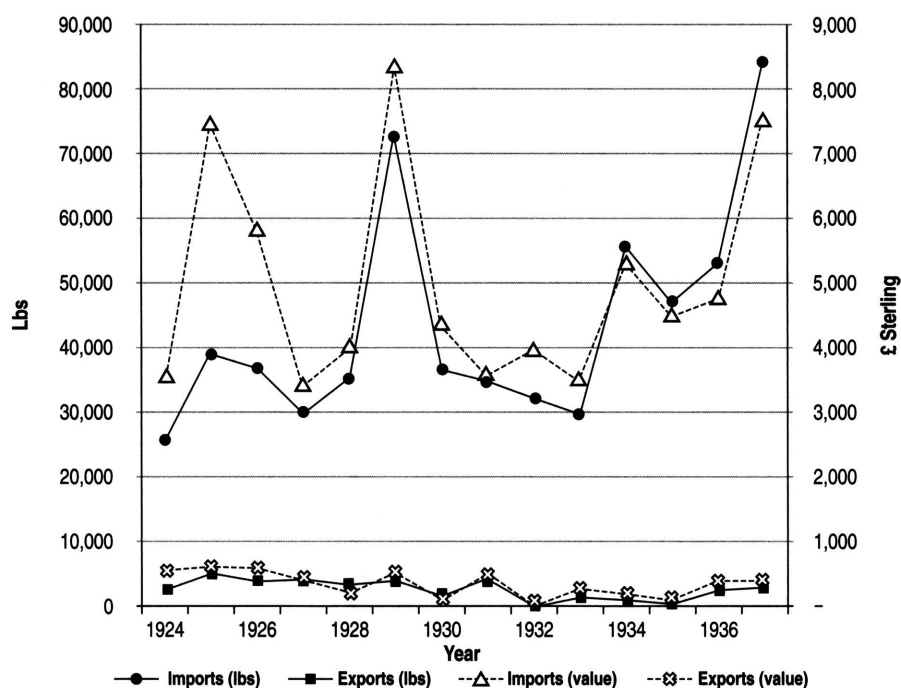


Figure 2. Bead imports and exports by value (in pounds sterling) and weight (lbs.), 1924-1937 (Straits Settlements 1924-1937; Malaya 1924-1937).

which represents traders' profit margins and transport and transaction charges. The statistics have not been adjusted to eliminate these differences, however, as there is no reliable estimate of such costs. Data extracted from the *Return of Foreign Imports and Exports* for British Malaya do not include imports meant for transshipment within Malaya.

EARLY BEAD TRADE, 1827-1839: STRAITS SETTLEMENTS AS A DISTRIBUTION CENTER

Information on the early bead trade extracted from the shipping lists of the *Singapore Chronicle and Commercial Register* and *Pinang Gazette and Straits Chronicle* is presented in Table 1. The *Singapore Chronicle and Commercial Register* also provided weekly prices of major tradeable goods and had begun to include gold thread prices by 1835. The sporadic entries of beads and the absence of price data indicate that they may have been a peripheral trade commodity. Although entries for beads are not likely to be comprehensive and bead imports and exports may have been classified as "sundries," the lists do provide a picture of bead trade in the early 19th century.

Turning first to imports, Table 1 reveals that, apart from five piculs (equivalent to 133.3 lbs.) of beads imported from Penang, all bead imports to Singapore were from the west.

In contrast, both entries for imports to Penang were from the east (Madras and Macau). Only eight inward shipments of beads were noted and, of these, four shipments were from Europe. This suggests that a significant part of the bead trade in the early 19th century may have consisted of European beads, most likely glass.

The main manufacturing centers for glass beads were Venice, Bohemia, and Germany. Lists of European glass exporters show that at least a few of them did export glass manufactures, possibly including glass beads, to Singapore and the region (Neuwirth 1994:494-506). Although companies such as J. Zeisler also exported directly to places like Java and Sumatra, Singapore maintained a role as a trading center for beads.

As for exports, European beads formed part of the goods re-exported from Singapore to other Straits Settlements ports and the hinterland. Sheppard (1978:89) has estimated that glass seed beads have been used in Sarawak since the 1820s, and it is not inconceivable that some of the beads exported from Singapore could well have been among the first shipments of glass seed beads to Sarawak.

Two shipments of beads from Singapore to India are indicated. It is unclear whether these were of Chinese origin. While it is possible that not all bead imports or exports were recorded, there is an interesting absence of the import of

Table 1. Imports and Exports of Beads for Singapore and Penang, 1827-1839.

Date	Exports			Imports		
	Quantity	Carrier	Destination	Quantity	Carrier	Origin
	From Singapore:			To Singapore:		
6/1/31*	2 piculs	British	Madras			
13/1/31*	4 piculs European beads	Native vessels	Presumably the surrounding islands			
28/07/31*	4 boxes	British	Manila	2 boxes	British	Liverpool
15/9/31*				1500 lbs (11-1/4 piculs)	Danish	Altona
22/9/31*	1 cask blue beads	British	Malacca and Penang			
17/11/31*				3 cases glass beads	British	Calcutta
8/12/31*	6 tubs	Native craft	Presumably the surrounding islands			
25/1/32*	5-1/4 piculs German beads	Dutch	Penang and W.C. Sumatra			
22/2/32*	10 casks	unspecified	Tranquebar (India)			
12/4/32*				5 piculs	British	Penang
17/10/35*				1 cask and 1 case	British	London
21/11/35*				8 catties (10- 2/3 lbs.) Arabian beads	British	Juddah (Jeddah)
				1 case	British	Liverpool
	From Penang:			To Penang:		
1/09/38**				2 boxes China beads	unspecified	Madras
22/09/38**	200 dr. weight (Spanish \$750) coral beads	unspecified	Malacca and Singapore			
9/02/39**				18 dozen China beads	unspecified	Macau

Sources: (*) *Singapore Chronicle and Commercial Register* (1827-1835), and (**) *Pinang Gazette and Straits Chronicle* (1838-1839).

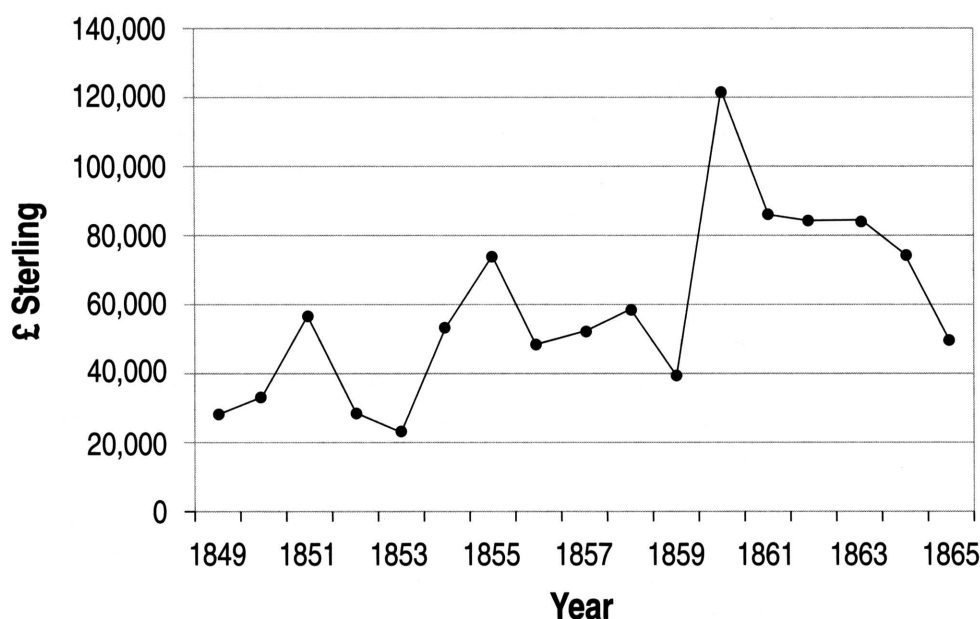


Figure 3. Bead imports into British India by value (in pounds sterling), 1849-1865 (Great Britain 1867: Table 29).

Chinese beads into Singapore. Such beads may have come through Penang, which received a shipment of beads from Macau. One shipment of “China beads” to Penang from Madras opens to question whether “China beads” refers to Chinese-made beads or beads made of porcelain.⁵ The “blue beads” exported to Malacca and Penang from Singapore may have been Chinese or European. Blue-glass beads made in Indonesia appear to have been popular in parts of the Indonesian archipelago in the 17th century, and Chinese and Dutch beads of blue glass have also been found in Indonesia (Adhyatman and Arifin 1996:34, 86-87; Munan 2005:30-31, 132).

While import and export data are sporadic, they do present a picture of the Straits Settlements acting as a distribution center for the bead trade originating from Europe and possibly from China and India as well during the 1827-1839 period. The ultimate destinations of the beads were the hinterland regions where they were bartered for native products, continuing a pattern of trade established by the 15th century.

BEAD TRADE WITH INDIA, 1840-1869

Very little statistical data is available for the 1840-1869 period. Some information relevant to the Straits Settlements can, however, be gleaned from the *Statistical Abstract Relating to British India 1840-65* [Statistical Abstract](Great Britain 1867) and the *Statistical Tables Relating to British*

Self-governing Dominions, Crown Colonies, Possessions, and Protectorates [Statistical Tables](Great Britain 1855-1866).

Figure 3 shows the value of bead imports into British India for the 1849-1865 period based on aggregate data from Table 29 of the *Statistical Abstract*. An increasing trend in bead import values can be seen. Data for the value of total imports from the *Statistical Abstract* and the *Statistical Tables* do vary slightly, however, casting some doubt on their accuracy and should, therefore, be viewed as indicators of the direction of changes in bead trade rather than as representing absolute values.

Between 1853 and 1866, over 90% of the bead imports into British India were from Britain (Great Britain 1855-1866). These may have been of English manufacture or, more likely, obtained from Holland, Germany, and/or Venice (see Hughes 1961:181). A part of the European beads shipped to India were used in the beadwork of Rajasthan, Gujarat, and the Deccan Plateau (Morrell 1995:106-108). The 19th-century Venetian bead sample book in the Slade Collection, believed to have belonged to a bead trader, provides an idea of the types of beads exported to India at this time (Karklins 1985:41-82). Interestingly, the sample book does not contain any glass seed beads which were widely used in Gujarati beadwork (see Dhaky 1966).

As for bead exports, a detailed breakdown by destination is only available from the *Statistical Tables* for the period 1854-1856 (Great Britain 1855-1866). Over

Table 2. Bead Trade Between British India and the Straits Settlements (in Pounds Sterling), 1854-1871.

Year	1854	1855	1856	1870	1871
Imports from the Straits Settlements to British India	314	88	404	0	320
Exports to the Straits Settlements from British India	274	918	48	343	160
Net export to the Straits Settlements	-40	830	-356	343	-159

Sources: *Statistical Tables Relating to British Self-Governing Dominions, Crown Colonies, Possessions, and Protectorates*, 1854-1856 (Great Britain 1855-1866), and Straits Settlements *Blue Book*, 1870 and 1871 (Straits Settlements 1870-1871). For the years 1870 and 1871, the values are converted into Sterling at the exchange rates used in the *Blue Books*.

85% of the value of beads imported by India during this period were consumed domestically. The main destination for bead exports was Africa (receiving 71% in 1854-1856) with only 6% by value of beads being exported to the Straits Settlements. The Straits Settlements also exported beads to British India as shown in Table 2. Unfortunately, the limited data preclude the formulation of any clear patterns.

BEAD TRADE, 1870-1937: EXPANSION AND DECLINE

Detailed statistical information is available for the period from 1870 to 1937, and the data reveal the overall pattern of the bead trade at this time. The time frame has been subdivided into four segments for closer investigation: 1) 1870-1899, a time when the bead trade shows an increasing trend; 2) 1900-1903, a period of highly volatile trade; 3) 1904-1914, when the regional bead trade declines; and 4) 1918-1937, the postwar period where there is a rise in bead imports which reflects the growth of domestic demand.

Increased Trade: 1870-1899

The Straits Settlements imported nearly 80% of its beads from Europe between 1870 and 1899. These were mainly from Germany, Italy, and Austria (Bohemia), traditional producers of cut, molded, and blown glass beads, as well as Britain. The remainder of the imports came from India, predominantly between 1895 and 1898 (varying from 16% to 29%), and China and Hong Kong. Table 3 shows the countries of origin of bead imports.

Italy was by far the largest supplier of beads to Singapore, accounting for 40% of the total imports by value. Austria, Germany, and Britain accounted for another 36% in aggregate. Data for Penang and Singapore are provided

separately from 1881 until 1920. For Penang, the value of beads imported was small compared to Singapore until the 1890s. From 1890 to 1899, the highest percentage of imports to Penang was from Germany (40%) and British India (36%). The dominance of imports from Germany rather than Italy may have been the result of stronger ties between German firms and the Penang merchants; for example, the trading firms with strong German connections—such as Katz Brothers and Huttenbach Brothers—both carried on activities in Penang (Chiang 1970:253; Huff 1994:258) and regularly advertised in the *Pinang Gazette and Straits Chronicle* (1886-1887).

Based on data in the Straits Settlements *Blue Books*, export markets can be said to have gradually built up between 1870 and 1899, averaging an annual rate of increase in export values of 5%, with an increasing share exported to Southeast Asia. From 1870 to 1879, only 68% of total bead value was exported to Southeast Asia. In the following two decades, however, this percentage rose to 83% in 1880-1889 and 90% in 1890-1899. For most of these years, the bulk of the remaining exports went to India, China, and Hong Kong.

The pattern of export demand suggests that, despite its small size, the Straits Settlements was increasingly active as a regional distribution center for beads in the late 19th century. Between 1877 and 1899, exports increased at a faster annual rate than imports (6% compared to 9%), leading to an excess of exports over imports from 1896 to 1899. This excess may have been met by depleting stocks of beads. Alternatively, the increase in the value of exports may reflect a rise in bead prices (rather than quantities) caused by strong export demand. Beads were also imported to satisfy domestic demand, evidenced by the consistently positive net import values until 1895. The market for beads in the Straits Settlements itself could have come from various sources.

Table 3. Percentage of Beads Imported by Country of Origin, 1870-1899.

Country	Percentage	
	Singapore (includes Penang before 1881)	Penang (1881 to 1899 only)
Austria (including Bohemia)	12	0
France	5	2
Germany	12	34
Italy	40	0
Britain	12	2
British India	6	43
Indonesian Archipelago	3	0
China and Hong Kong	4	14
Other (Arabia, Suez, Egypt, Australia, USA, Belgium, Holland, French India, Portuguese India, Turkey)	6	5

Source: Straits Settlements *Blue Books*, 1870-1899 (Straits Settlements 1870-1899).

Expatriate European women may have used glass beads in their woolwork patterns, a popular hobby that had traveled from Europe. Blaze Reidel and Co., a shop on Beach Street in Penang, regularly advertised patterns for woolwork in the *Pinang Gazette and Straits Chronicle* throughout 1886 and early 1887. There was also a demand for European seed beads which were used in *Peranakan* (acculturated) Chinese beadwork and in Malay embroideries.

Volatility in the Bead Trade: 1900-1903

Overall, the period between 1900 and 1903 represents a period of uncertainty and adjustment to the high export demand of the late 1890s. The threefold increase in the value of bead imports between 1899 and 1900 was met by an increase in the value of imports from Germany (+517%), Italy (+70%), and Austria (+170%). In 1901, imports doubled again with a large part of the increase coming from Germany and Calcutta. The latter may have comprised Indian glass beads but could also have included European beads shipped via British traders in India. This surge in 1900-1901 coincides with the beginning of industrial production of glass beads and bangles in Calcutta and Firozabad by Bohemian bead manufacturers (Petr Nový 2003:pers. comm.). Statistics on Indian glass production also reveal the establishment of industrial-scale Indian glass factories at this time (India, Department of Statistics 1917:10-41).

The subsequent decrease in the value of imports in 1902-1903 may reflect traders compensating for excess imports in previous years.

The volatility in bead imports up to 1903 may have resulted from a prevailing uncertainty concerning the demand for beads in the late 19th century, particularly for re-export. Values of bead exports doubled in 1895-1896 and fell significantly in 1897-1898, but remained above the levels of imports during that period. The subsequent sharp increase in the value of bead imports to the Straits Settlements may have been led by the increase in the demand for beads from the Indonesian archipelago. At the height of the bead trade between 1890 and 1914, Sumatra was the most important market for beads re-exported from the Straits Settlements and accounted for 38% by value of total bead exports. Borneo (including Sarawak) imported 20% and the rest of the Indonesian archipelago imported 18% of the total. This contrasts with Francis' (1989b:24) finding that Borneo was the main market for beads exported from Singapore during the 1909-1929 period.

Figure 4 shows the growth in the value of exports from Singapore and Penang to Sumatra from 1890 to 1914. Penang had close business and social ties with the northern half of Sumatra. Although Penang had overtaken Singapore in terms of export values by 1898, the difference was almost negligible by 1905. The trading community in Penang may have taken advantage of a spurt in demand for beads from

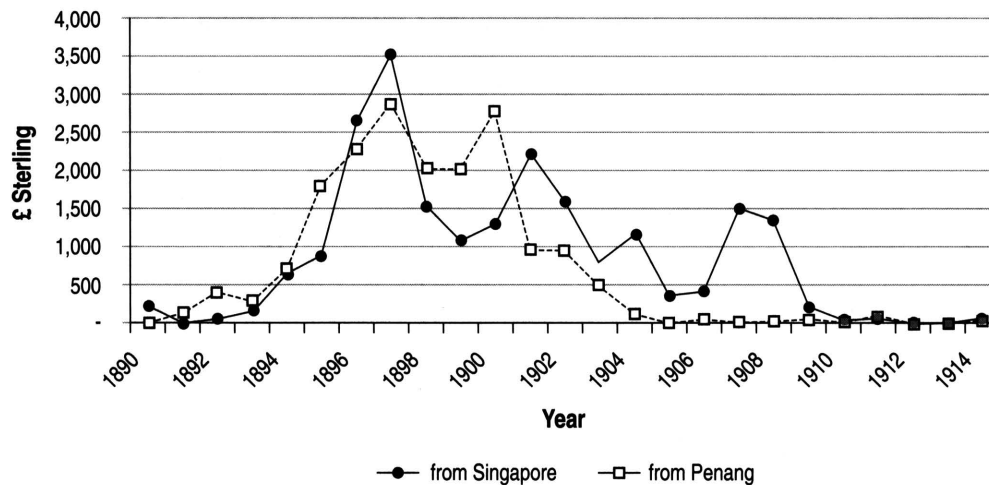


Figure 4. Exports to Sumatra from the Straits Settlements by value (in pounds sterling), 1890-1914 (Straits Settlements 1890-1914).

Sumatra to exploit their traditional trading links. Singapore continued to export to Sumatra until World War I. With a wider distribution network that serviced the rest of the Indonesian archipelago, Indo-China, and the Philippines, Singapore served as the main center for bead trade for the region.

An examination of the types of beads found in the Indonesian archipelago provides insight into the kinds of beads that were being traded during this period. Adhyatman and Arifin (1996) describe a wide selection of beads, including those of gold, semiprecious stones such as quartz and carnelian, and glass. Notable among the latter are monochrome coiled and drawn varieties, and polychrome lampwound beads among which are mosaic and millefiori forms. While the lampwound beads are undoubtedly of European manufacture, those of semiprecious stones may have been produced in India or China.

Decline of the Re-export Trade: 1904-1914

The bead trade during the first half of the 20th century can be clearly divided into two periods separated by World War I. The period from 1904 to 1914 is characterized by a gradual decline in the distributive role of the Straits Settlements in bead trade. During this time the value of imported beads fell more than twofold (from £12,714 to £5,472). This decline was reflected both by the decrease in the re-export of beads (from £5,959 to £2,017) and by net imports. What is interesting is that the value of net imports for this period exceeded that of exports for the entire period, implying the growing influence of domestic demand in the bead trade.

Bead imports were mainly from Germany and Italy, but the overall percentage of beads imported from Europe between 1904 and 1914 was only 49% compared to 78% for the 1870-1904 period (*see* Table 4). Imports of beads from Europe were supplemented mainly by imports from British India (Bombay, Calcutta, and Madras) and Burma. It is uncertain whether the bead trade actually became less European-dominated or if the decline in direct shipments from Europe is simply the result of a larger percentage of European beads being imported indirectly via India.

Although the Netherlands Indies and Sarawak remained important markets, their share of exports fell from 80% of the total value to 52% between 1904 and 1914, with most of the decline occurring in the latter half of this period. The reduced share persisted into the war years. An increase in exports to Indo-China only offset this decline to a small degree.

Figures for glass bead imports (initially termed *korallen*, *glazen* and later changed to *kralen*, *glazen*) to the Netherlands Indies provided in the *Statistiek van den Handel en de In- en Uitvoerrechten in Nederlandsch-Indië* (Statistics of Trade for Imports and Exports in the Netherlands-Indies) suggest that the value of beads channeled through the Straits Settlements, particularly Singapore, was far larger (Dutch East Indies 1910). For 1910, the value of imports from Singapore into the Netherlands Indies totaled 50,596 Dutch guilders (equivalent to 35,630 Straits Settlements dollars), compared to the figure of \$14,167 recorded in the Straits Settlements *Blue Book* for 1910. Java was the largest recipient of glass bead imports (over 80%) through the ports of Batavia, Semarang, and Surabaya.

Table 4. Percentage of Beads Imported by Country of Origin, 1904-1937.

Country	Percentage	
	1904-14	1918-37
Austria (including Czechoslovakia)	13	34
France	0	7
Germany	22	25
Italy	10	7
British India	42	9
Japan	0	10
Other (USA, Belgium, Holland, Middle East, Turkey, non-British India, Indonesia, China, Hong Kong, Australia)	13	8

Sources: Straits Settlements *Blue Books*, 1904-1937 (Straits Settlements 1870-1937), and *Return of Foreign Imports and Exports* for British Malaya, 1924-1937 (Malaya 1924-1937).

The discrepancy in values is puzzling. One possible explanation is that the Straits Settlements and Netherlands Indies used different methods of recording the origin and destination of goods. Export values for the Straits Settlements excluded transshipment trade (goods imported and then exported via through bills of lading). It is possible, however, that the *Statistiek van den Handel* listed goods under their transshipment port rather than their port of origin. Another possible reason for the difference is that bead values were based on market prices at their destination and included some mark-up and transportation costs. What the detailed breakdown of values from the *Statistiek van den Handel* reveals is that, although Singapore was a significant exporter to the Netherlands Indies, it faced competition from the Netherlands and Japan, each of which accounted for 20% of the glass bead imports into the Netherlands Indies. It is, therefore, not surprising that the value of exports to Singapore's main markets declined in the following decades.

The Rise of Domestic Demand: 1918-1937

Starting in 1918, there was an increase in the trend value of imported beads which peaked in 1925, and again in 1929. Table 4 shows the percentage of beads imported by value from the main exporting countries. Europe remained the largest supplier of beads, with Czechoslovakia emerging as a major bead exporter in 1927, ten years after it gained independence from Austria. Imports of Japanese beads also increased from 1918, and while their value averaged

7% of the total between 1924 and 1937, their proportion by weight was much larger, averaging 13% for the period (Francis 1989a:23, 2002:172). This differential is due to the lower price per pound of Japanese beads. The increase in the import of Japanese beads is coincident with a general increase in the import of Japanese manufactures which doubled in Singapore between 1929 and 1934, putting them in competition with European imports (Huff 1994:265).

The value of bead exports fell to almost negligible levels after 1918. The value of exports as a percentage of imports decreased from 37% between 1904 and 1914, to 13% after World War I. Francis (1989b:24) argued that the Straits Settlements and Malaya could not have absorbed such large quantities of imported beads and the seemingly large difference between imports and exports was the result of difficulty in recording exports. This explanation is unsatisfactory given the previously high levels of exports. A more plausible explanation for the low level of bead exports is that bead exporters were selling directly to other South-east Asian bead consumers, bypassing Singapore in its role as an emporium.

In the Netherlands Indies (apart from Java), European trading firms started to deal directly with indigenous traders in 1925, side-stepping the local Chinese trading network (Touwen 2001:207). This may have increased the volume of bead imports that bypassed Singapore, which traditionally had close ties with Chinese merchants in Indonesia. Even before the 1920s, ports on the west coast of Sumatra and the Celebes were already receiving over 40% in value of their glass bead imports directly from Japan (Dutch East

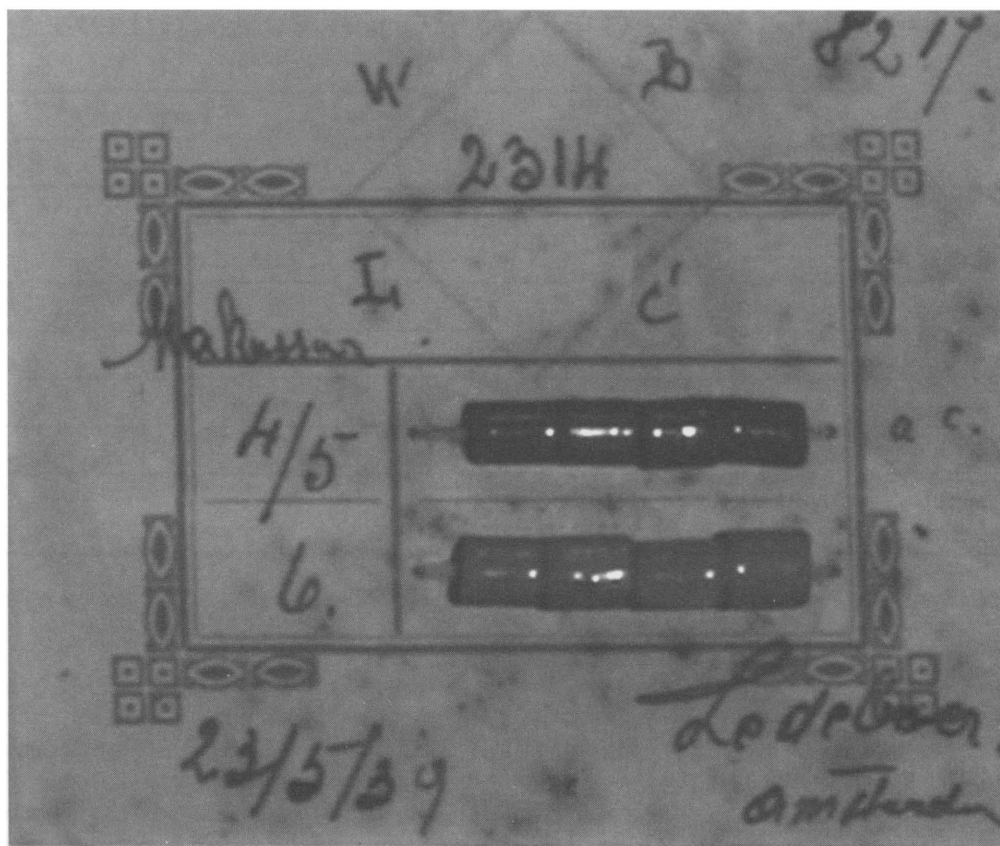


Figure 5. Sample card from the Società Veneziana Conterie, marked “Makassar” and dated 23 May 1939; H: 6 cm (courtesy of Luigi Cattelan, Venice, Italy)(photo by author).

Indies 1910, III). A sample card from the Società Veneziana Conterie e Cristallerie which is marked “Makassar” and dated 23 May 1939 may have been used in bead trade that bypassed the Straits Settlements (Fig. 5). In fact, a significant quantity of beads may have been imported to the surrounding region from places other than the Straits Settlements.

For instance, the annual Sarawak Trade Returns for 1905, 1906, and 1907, which were published in the *Sarawak Gazette* show total bead imports of \$2,682, \$1,403, and \$2,264, respectively (Sarawak, Treasury Department 1906, 1907, 1908), while the Straits Settlements *Blue Book* showed exports of \$702-worth of beads to Sarawak in 1907 only (Straits Settlements 1907). Larger companies such as F.E. Zuellig, a Swiss trading company founded in 1939, exported Venetian beads not only to Singapore but also the Philippines as an adjunct to its other trading activities (Fig. 6).

Figure 7 shows the value of net imports of beads based on the difference between import and export values. From 1918, almost all of the imported beads were for domestic consumption. The sustained periods of high net imports of

beads after 1918 suggests that they resulted from domestic demand and not from an overestimation of re-export demand, as may have happened in the last years of the 19th century.

The pattern of net imports between 1900 and 1937 is particularly interesting given the high percentage of European beads (Fig. 8; Table 4). In the Straits Settlements, both the *Peranakan* Chinese and Malay communities used European beads, particularly glass seed beads manufactured in Venice and Bohemia. The Straits Settlements exported small quantities of beads to the rest of Malaya, possibly for use by the Malay communities. The *Peranakan* Chinese were known for their lavish beadwork creations, some pieces using up to 270,000 beads (Ho 1987:47). Numerous examples of *Peranakan* beadwork survive from the early 20th century, and the growth in net bead imports coincides with periods when *Peranakan* beadwork is likely to have been most actively produced (Fig. 9).

In the early 20th century, the reduction of bead exports and the decline in the role of the Straits Settlements as a regional distributor of beads was replaced by a growing local demand for beads. What had once been an important trade commodity had been incorporated into local traditions,

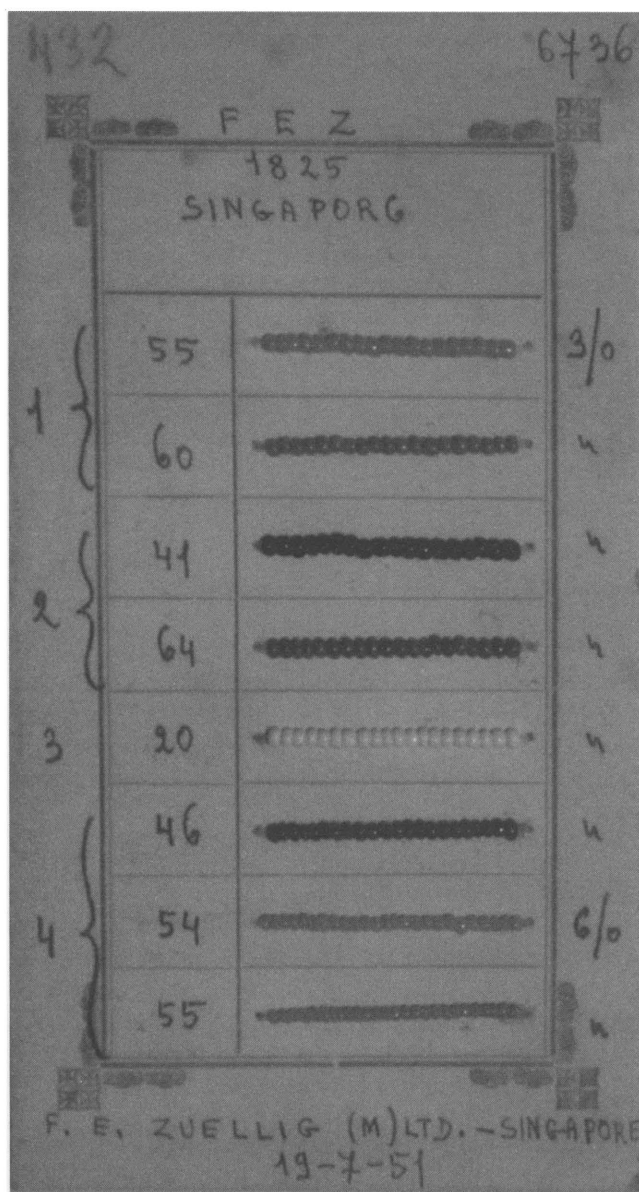


Figure 6. Sample card from the Società Veneziana Conterie, dated 19 July 1951, and marked "FEZ 1825 Singapore" and "F.E. Zuellig (M) Ltd. - Singapore;" H: 12.4 cm (collection of Luigi Cattelan)(photo by author).

facilitating the innovation and creation of new craft forms.

DOMESTIC DEMAND IN PENANG AND MALACCA

Penang is often thought of as the center of the finest *Peranakan* Chinese beadwork.⁶ Despite this, the statistics available for Penang between 1881 and 1920 show that net imports of beads to Penang were frequently negative and never very high compared to Singapore (Fig. 8). A trade in beads between Singapore and Penang must, therefore, have taken place to serve this specific market, one that was not fully reflected in the official statistics. The high proportion

of beads imported into Penang from Germany and Calcutta between 1881 and 1920 (40% and 32%, respectively) satisfied local demand only to a very small extent (Straits Settlements 1870-1937).

Similarly, the existence of *Peranakan* Chinese beadwork from Malacca suggests that it imported a reasonable quantity of glass seed beads. Only sporadic and very negligible values for bead trade were recorded for Malacca (Table 5). Official statistics probably did not capture much of the internal trade in beads occurring between small shopowners and bead merchants located in Singapore and Malacca.

Between 1904 and 1937, it can be surmised that an increasing domestic demand for beads was met by an unrecorded parallel flow of trade in beads from Singapore to Penang and Malacca. As Singapore's regional role as a trading center diminished with a rise in direct trade between bead exporters and the Indonesian archipelago, its position as a local distributor to its sister ports appears to have strengthened. Non-aggregate statistics for Singapore, Penang, and Malacca are not available after 1920, and the persistence of Singapore as a local distributor remains speculative.

CONCLUSION

The bead trade in the Straits Settlements was dynamic, influenced by its trading networks with the hinterland and by regional demand. Based on available statistics on the imports and exports of beads, it is possible to document the role of the Straits Settlements, particularly Singapore, in this trade.

Until the end of the 19th century, the Straits Settlements acted as a regional emporium for beads. Singapore played a particularly important role, distributing beads to Borneo, the rest of the Indonesian archipelago, and Indo-China. To a more limited extent, this role was also taken up by Penang in the last decade of the 19th century, specifically for a Sumatran market. The movements in bead imports and exports often fluctuated reflecting the adjustments of the bead traders to changing demands. This is most clearly illustrated by the excess demand for re-export beads in the late 1890s, which was followed by sharp increases in bead imports from 1900 to 1903.

As bead exporters developed direct marketing channels with the Indonesian archipelago, the value of the beads exported from the Straits Settlements declined, eroding its position as a regional mart. Starting in the early 20th century, the increase in net bead imports was fueled by a growth in the domestic demand for beads. Local needlework traditions successfully incorporated imported beads, generating a

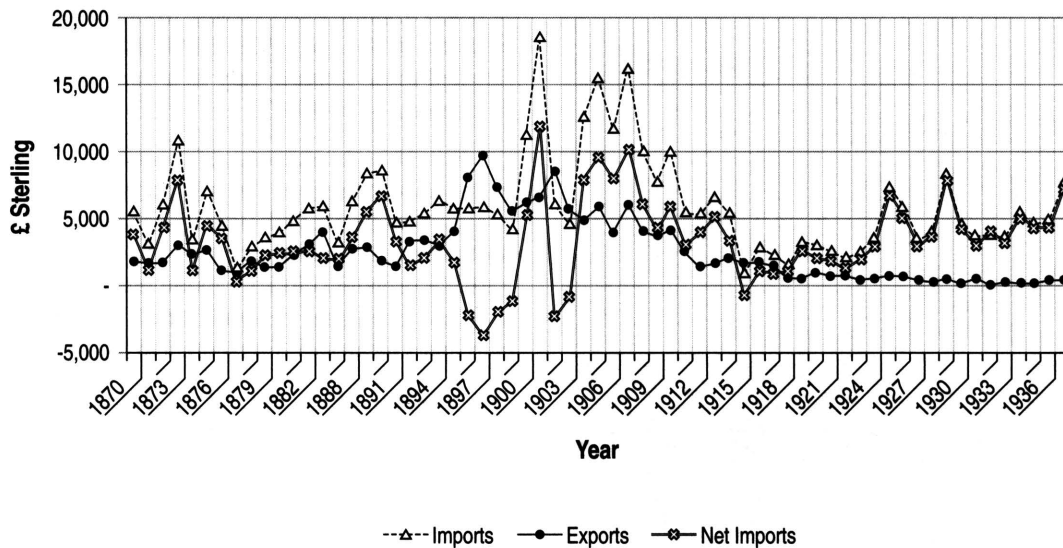


Figure 7. Bead trade in the Straits Settlements (in pounds sterling), 1870-1937 (Straits Settlements 1870-1937; Malaya 1924-1937).

continued demand for beads. The sustained periods of high net imports of beads suggest that there were two major periods in beadworking: one that lasted from about 1895 to 1914, and a second phase from 1920 onwards. Between 1900 and around 1920, Singapore took on a new role as local distributor of beads to Penang and Malacca, ushering in a period of development in local beadwork.

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ENDNOTES

1. What comprised the Netherlands Indies in the past varied over time; it differs from what constitutes present-day Indonesia and is linked to the expansion of Dutch control during the 18th to 20th centuries. See Cribb (2000:113-148) for a detailed discussion.
2. Here and elsewhere, a dollar sign (\$) denotes Straits

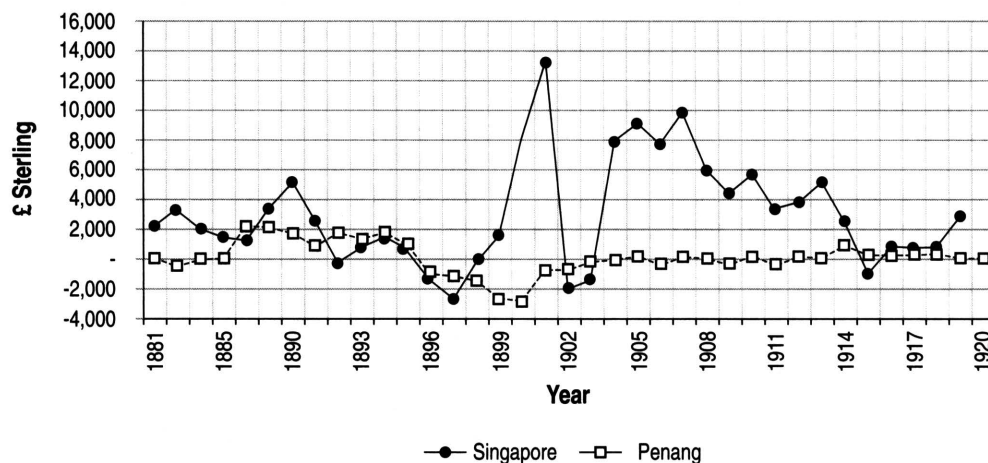


Figure 8. Net imports of beads to Singapore and Penang, 1881-1920 (Straits Settlements 1881-1920).

Table 5. Imports of Beads to Malacca, 1870-1937.

Year	Value (\$)	Origin
1874*	535	Singapore
1905	75	Singapore
1908	1	Inter-port trade
1911	50	Not specified
1913	10	Inter-port trade
1916	95	Inter-port trade

(*) to Malacca and Penang. Source: Straits Settlements *Blue Books* (Straits Settlements 1870-1937), years as specified in table.

Settlements dollars.

- British Malaya comprised the Straits Settlements (Singapore, Penang, Province Wellesley on the mainland opposite Penang, Malacca, Labuan, Christmas Island, and the Dindings), the Federated Malay States of Negri Sembilan, Selangor, Pahang, and Perak, and the Unfederated Malay States of Johor, Kedah, Perlis, Kelantan, and Terengganu.

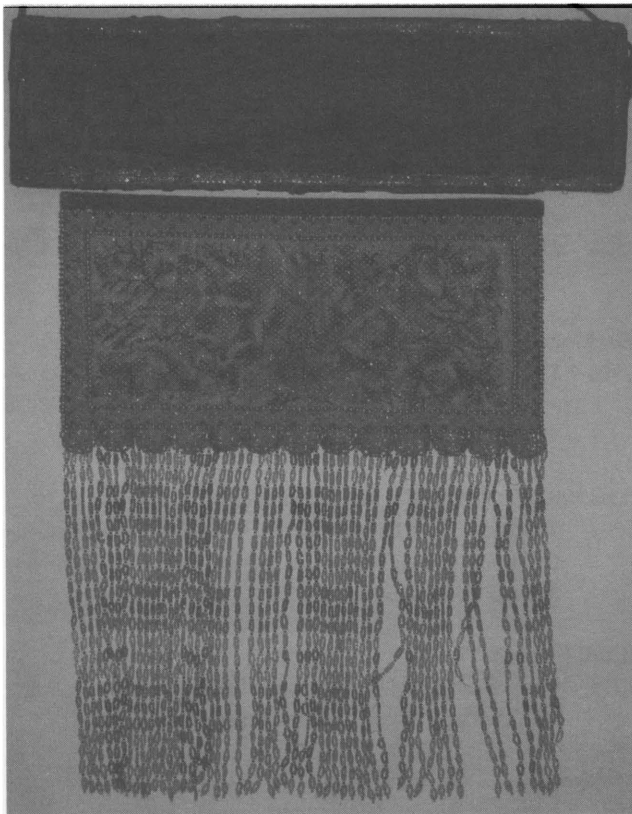


Figure 9. Beadwork panel from Penang, ca. 1900-1920. Width: 22 cm; length 31 cm (courtesy of Ken Yap, Kuala Lumpur)(photo by author).

- Bead prices and, hence, traded values may have been affected by the combined effects of German hyperinflation and the return, in 1925, of Sterling (against which the Straits dollar was pegged) to the Gold Standard at an inflated rate. A single exchange rate for the Reichsmark is difficult to obtain for the years 1923 to 1925, given the rate of hyperinflation, but as an indication, the Reichsmark/Japanese yen exchange rate fell by over 20,000% while the Straits Settlements dollar rose by about 10% against the yen between 1923 and 1926 (see Schneider et al. 1992,V:97, 235). It would be interesting to investigate the impact of currency movements on the European bead industry, particularly after the end of World War I.
- The French produced beads called "Porcelain" or "Bapterosses" in the 19th century (Jargstorf 1995:78).
- Tan (1993:2, 25, 31) notes that the acculturated Chinese of Penang did not, in fact, refer to themselves as *Peranakan* but as Straits Chinese or *Baba*. They did, however, do what has been popularly termed as Straits Chinese beadwork (Ho 1987) or *nonya* beadwork (Eng-Lee 1989).

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Hwei-Fe'n Cheah
School of Humanities
Australian National University
Canberra, ACT 0200
Australia
Email: cheahhf@gmail.com